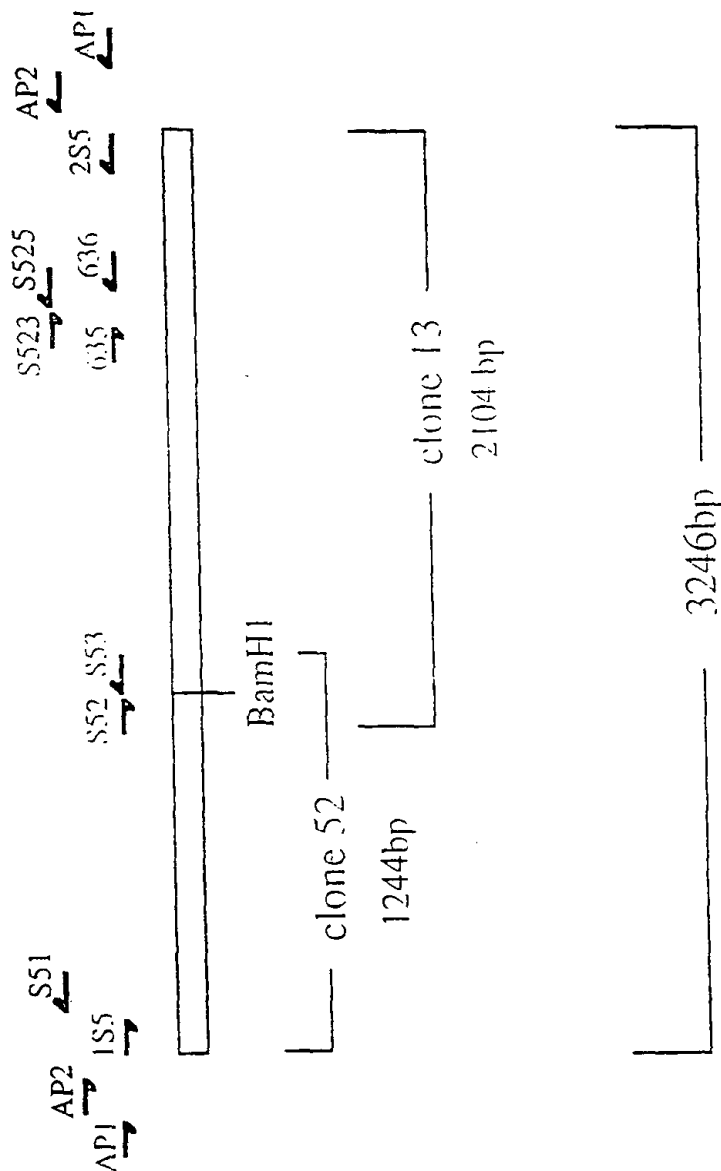
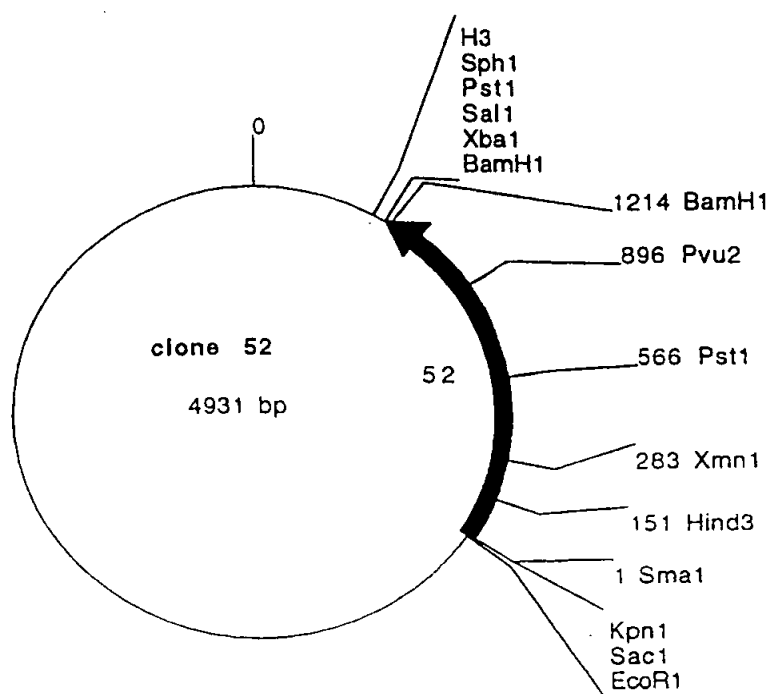


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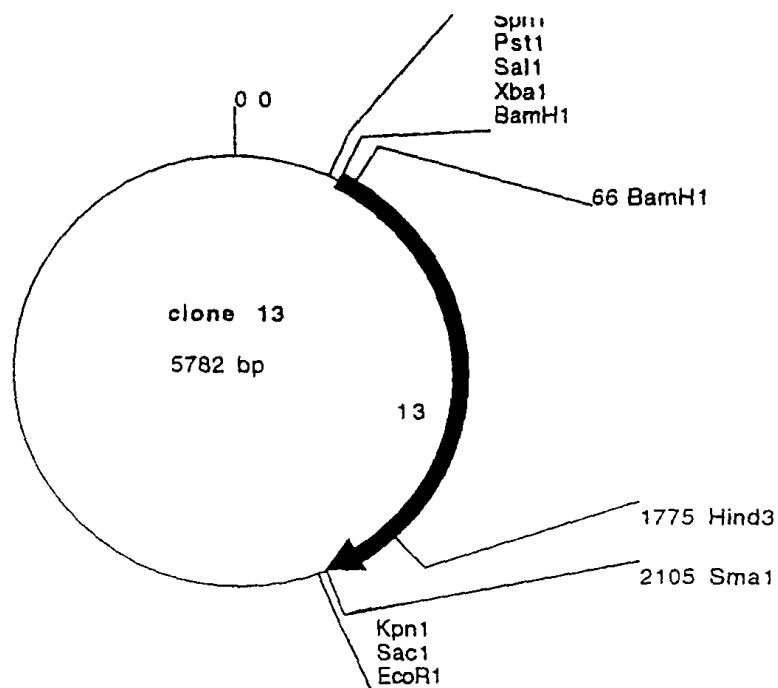
Figure 1





**Figure 2**

**Comments/References:** 52= 3' side of S5 (AtMSH3) 1244bp in pUC18/Sma1



**Figure 3**

**Comments/References:** 13 = 3' side of S5 (AIMSH3) 2104bp in pUC18/SmaI

002201" 6E262560

1	cCTAAGAAAGCGCGGAAATGGCAACCAAGTTGCCATAGCCAGCACGACCTTCCATTCTCTTAAACGAGGA	80
81	GATTACGAATAAGCAATT	144
1	M G K Q K Q Q T I S R F A P	15
145	AAA CCC AAA TCC CCG ACT CAC GAA CCG AAT CCG GTA GCC GAA TCA TCA ACA CCG CCA CCG	204
16	K P K S P T H E P N P V A E S S T P P	35
205	AAG ATA TCC GCC ACT GTA TCC TTC TCT CCT TCC AAG CGT AAG CTT CTC TCC GAC CAC CTC	264
36	K I S A T V S F S P S K R K L L S D H L	55
265	GCC GCC GCG TCA CCC AAA AAG CCT AAA CTT TCT CCT CAC ACT CAA AAC CCA GTA CCC GAT	324
56	A A A S P K K P K L S P H T Q N P V P D	75
325	CCC AAT TTA CAC CAA AGA TTT CTC CAG AGA TTT CTG GAA CCC TCG CCG GAG GAA TAT GTT	384
76	P N L H Q R F L Q R F L E P S P E Y V	95
385	CCC GAA ACG TCA TCA TCG AGG AAA TAC ACA CCA TTT GAA CAG CAA GTG GTG GAG CTA AAG	444
96	P E T S S S R K Y T P L E Q Q V V E L K	115
445	AGC AAG TAC CCA GAT GTG GTT TTG ATG GTG GAA GTT GGT TAC AGG TAC AGA TTC TTC GGA	504
116	S K Y P D V V L M V E V G Y R Y R F F G	135
505	GAA GAC GCG GAG ATC GCA GCA CGC GTG GTG TTG GGT ATT TAC GCT CAT ATG GAT CAC AAT TTC	564
136	E D A E I A A R V L G I Y A H M D H N F	155
565	ATG ACG GCG AGT GTG CCA ACA TTT CGA TTG AAT TTC CAT GTG AGA AGA CTG GTG AAT GCA	624
156	M T A S V P T F R L N F H V R L V N A	175
625	GGA TAC AAG ATT GGT GTA GTG AAG CAG ACT GAA ACT GCA GCC ATT AAG TCC CAT GGT GCA	684
176	G Y K I G V V K Q T E T A A I K S H G A	195
665	AAC CGG ACC GGC CCT TTT TTC CGG GCA CTG TCG GCG TTG TAT ACC AAA GCC ACG CTT GAA	744
196	N R T G P F F R G L S A L Y T K A T L E	215
745	GCG GCT GAG GAT ATA AGT GGT GGT TGT GGT GGT GAA GAA GGT TTT GGT TCA CAG AGT AAT	804
216	A A E D I S G G C G G E E G F G S Q S N	235
805	TTC TTG GTT TGT GTT GAT GAG AGA GTT AAG TCG GAG ACA TTA GGC TGT GGT ATT GAA	864
236	F L V C V V D E R V K S E T L G C G I E	255
865	ATG AGT TTT GAT GTT AGA GTC GGT GTT GGC GTT GAA ATT TCG ACA GGT GAA GTT GTT	924
256	M S F D V R V G V G V E I S T G E V V	275

Figure 4

004207" 6E262560

925	TAT	GAA	GAG	TTC	AAT	GAT	AAT	TTC	ATG	AGA	AGT	GGA	TTA	GAG	GCT	GTG	ATT	TTG	AGC	TTG	984
276	Y	E	E	F	N	D	N	F	M	R	S	G	L	E	A	V	I	L	S	L	295
985	TCA	CCA	GCT	GAG	CTG	TTG	CTT	GGC	CAG	CCT	CTT	TCA	CAA	CAA	ACT	GAG	AAG	TTT	TTG	GTG	1044
296	S	P	A	E	L	L	L	G	Q	P	L	S	Q	Q	T	E	K	F	L	V	315
1045	GCA	CAT	GCT	GGA	CCT	ACC	TCA	AAC	GTT	CGA	GTG	GAA	CGT	GCC	TCA	CTG	GAT	TGT	TTT	AGC	1104
316	A	M	A	G	P	T	S	N	V	R	V	E	R	A	S	L	D	C	F	S	335
1105	AAT	GGT	AAT	GCA	GTA	GAT	GAG	GTT	ATT	TCA	TTA	TGT	GAA	AAA	ATC	AGC	GCA	GGT	AAC	TTA	1164
336	N	G	N	A	V	D	E	V	I	S	L	C	E	K	I	S	A	G	N	L	355
1165	GAA	GAT	GAT	AAA	GAA	ATG	AAG	CTG	GAG	GCT	GCT	GAA	AAA	GGA	ATG	TCT	TGC	TTG	ACA	GTT	1224
356	E	D	D	K	E	M	K	L	E	A	A	E	K	G	M	S	C	L	T	V	375
1225	CAT	ACA	ATT	ATG	AAC	ATG	CCA	CAT	CTG	ACT	GTT	CAA	GCC	CTC	GCC	CTA	ACG	TTT	TGC	CAT	1284
376	H	T	I	M	N	M	P	H	L	T	V	Q	A	L	A	L	T	F	C	H	395
1285	CTC	AAA	CAG	TTT	GGA	TTT	GAA	AGG	ATC	CTT	TAC	CAA	GGG	GCC	TCA	TTT	CGC	TCT	TTG	TCA	1344
396	L	K	Q	F	G	F	E	R	I	L	Y	Q	G	A	S	F	R	S	L	S	415
1345	AGT	AAC	ACA	GAG	ATG	ACT	CTC	TCA	GCC	AAT	ACT	CTG	CAA	CAG	TTG	GAG	GTT	GTG	AAA	AAT	1404
416	S	N	T	E	M	T	L	S	A	N	T	L	Q	Q	L	E	V	V	K	N	435
1405	AAT	TCA	GAT	GGA	TCG	GAA	TCT	GGC	TCC	TTA	TTT	CAT	AAT	ATG	AAT	CAC	ACA	CTT	ACA	GTA	1464
436	N	S	D	G	S	E	S	G	S	L	F	H	N	M	N	H	T	L	T	V	455
1465	TAT	GCT	TCC	AGG	CTT	CTT	ACA	CAC	TGG	GTG	ACT	CAT	CCT	CTA	TGC	GAT	AGA	AAT	TTG	ATA	1524
456	Y	G	S	R	L	L	R	H	W	V	T	H	P	L	C	D	R	N	L	I	475
1525	TCT	GCT	CGG	CTT	GAT	GCT	GTT	TCT	GAG	ATT	TCT	GCT	TGC	ATG	GGA	TCT	CAT	AGT	TCT	TCC	1584
476	S	A	R	L	D	A	V	S	E	I	S	A	C	M	G	S	H	S	S	S	495
1585	CAG	CTC	AGC	AGT	GAG	TTG	GTT	GAA	GAA	GGT	TCT	GAG	ACA	GCA	ATT	GTA	TCA	CCT	GAG	TTT	1644
496	Q	L	S	S	E	L	V	E	E	G	S	E	R	A	I	V	S	P	E	F	515
1645	TAT	CTC	GTG	CTC	TCC	TCA	GTC	TTG	ACA	GCT	ATG	TCT	AGA	TCA	TCT	GAT	ATT	CAA	CGT	GGA	1704
516	Y	L	V	L	S	S	V	L	T	A	M	S	R	S	S	D	I	Q	R	G	535
1705	ATA	ACA	AGA	ATC	TTT	CAT	CGG	ACT	GCT	AAA	GCC	ACA	GAG	TTC	ATT	GCA	GTT	ATG	GAA	GCT	1764
536	I	T	R	I	F	H	R	T	A	K	A	T	E	F	I	A	V	M	E	A	555
1765	ATT	TTA	CTT	CGG	GGG	AAG	CAA	ATT	CAG	CGG	CTT	GGC	ATA	AAG	CAA	GAC	TCT	GAA	ATG	AGG	1824
556	I	L	L	A	G	K	Q	I	Q	R	L	G	I	K	Q	D	S	E	M	R	575

Figure 4 (Continued)

002201" 66262560

1825	AGT	ATG	CAA	TCT	GCA	ACT	GTG	CGA	TCT	ACT	CTT	TTG	AGA	AAA	TTG	ATT	TCT	GTT	ATT	TCA	1884
576	S	M	Q	S	A	T	V	R	S	T	L	L	R	K	L	I	S	V	I	S	595
1885	TCC	CCT	GTT	GTG	GTT	GAC	AAT	GCC	GGA	AAA	CTT	CTC	TCT	GCC	CTA	AAT	AAG	GAA	GCG	GCT	1944
596	S	P	V	V	V	D	N	A	G	K	L	L	S	A	L	N	K	E	A	A	615
1945	GTT	CGA	GGT	GAC	TTG	CTC	GAC	ATA	CTA	ATC	ACT	TCC	AGC	GAC	CAA	TTT	CCT	GAG	CTT	GCT	2004
616	V	R	G	D	L	L	D	I	L	I	T	S	S	D	Q	F	P	E	L	A	635
2005	GAA	GCT	CGC	CAA	GCA	GTT	TTA	GTC	ATC	AGG	GAA	AAG	CTG	GAT	TCC	TCG	ATA	GCT	TCA	TTT	2064
636	E	A	R	Q	A	V	L	V	I	R	E	K	L	D	S	S	I	A	S	F	655
2065	CGC	AAG	AAG	CTC	GCT	ATT	CGA	AAT	TTG	GAA	TTT	CTT	CAA	GTG	TCG	GGG	ATC	ACA	CAT	TTG	2124
656	R	K	K	L	A	I	R	N	L	E	F	L	Q	V	S	G	I	T	H	L	675
2125	ATA	GAG	CTG	CCC	GTT	GAT	TCC	AAG	GTC	CCT	ATG	AAT	TGG	GTG	AAA	GTA	AAT	AGC	ACC	AAG	2184
676	I	E	L	P	V	D	S	K	V	P	H	N	W	V	K	V	N	S	T	K	695
2185	AAG	ACT	ATT	CGA	TAT	CAT	CCC	CCA	GAA	ATA	GTA	GCT	GAC	TTG	GAT	GAG	CTA	GCT	CTA	GCA	2244
696	K	T	I	R	Y	H	P	P	E	I	V	A	G	L	D	E	L	A	L	A	715
2245	ACT	GAA	CAT	CTT	GCC	ATT	GTG	AAC	CGA	GCT	TCG	TGG	GAT	AGT	TTT	CTC	AAG	AGT	TTC	AGT	2304
716	T	E	H	L	A	I	V	N	R	A	S	W	D	S	F	L	K	S	F	S	735
2305	AGA	TAC	TAC	ACA	GAT	TTT	AAG	GCT	GCC	GTT	CAA	GCT	CTT	GCT	GCA	CTG	GAC	TGT	TTG	CAC	2364
736	R	Y	Y	T	D	F	K	A	A	V	Q	A	L	A	A	L	D	C	L	H	755
2365	TCC	CTT	TCA	ACT	CTA	TCT	AGA	AAC	AAC	AAC	TAT	GTC	CGT	CCC	GAG	TTT	GTG	GAT	GAC	TGT	2424
756	S	L	S	T	L	S	R	N	K	N	Y	V	R	P	E	F	V	D	D	C	775
2425	GAA	CCA	GTT	GAG	ATA	AAC	ATA	CAG	TCT	GGT	CGT	CAT	CCT	GTA	CTG	GAG	ACT	ATA	TTA	CAA	2484
776	E	P	V	E	I	N	I	Q	S	G	R	H	P	V	L	E	T	I	L	Q	795
2485	GAT	AAC	TTC	GTC	CCA	AAT	GAC	ACA	ATT	TTG	CAT	GCA	GAA	GGG	GAA	TAT	TGC	CAA	ATT	ATC	2544
796	D	N	F	V	P	N	D	T	I	L	H	A	E	G	E	Y	C	Q	I	I	815
2545	ACC	GGA	CCT	AAC	ATG	GGA	GGA	AAG	AGC	TGC	TAT	ATC	CGT	CAA	GTT	GCT	TTA	ATT	TCC	ATA	2604
816	T	G	P	N	M	G	G	K	S	C	Y	I	R	Q	V	A	L	I	S	I	835
2605	ATG	GCT	CAG	GTT	GGT	TCC	TTT	GTA	CCA	GCG	TCA	TTT	GCC	AAG	CTG	CAC	GTG	CTT	GAT	GGT	2664
836	M	A	Q	V	G	S	F	V	P	A	S	F	A	K	L	H	V	L	D	G	855
2665	GTT	TTC	ACT	CGG	ATG	GGT	GCT	TCA	GAC	AGT	ATC	CAG	CAT	GGC	AGA	AGT	ACC	TTT	CTA	GAA	2724
856	V	F	T	R	M	G	A	S	D	S	I	Q	H	G	R	S	T	F	L	E	875

Figure 4 (Continued)

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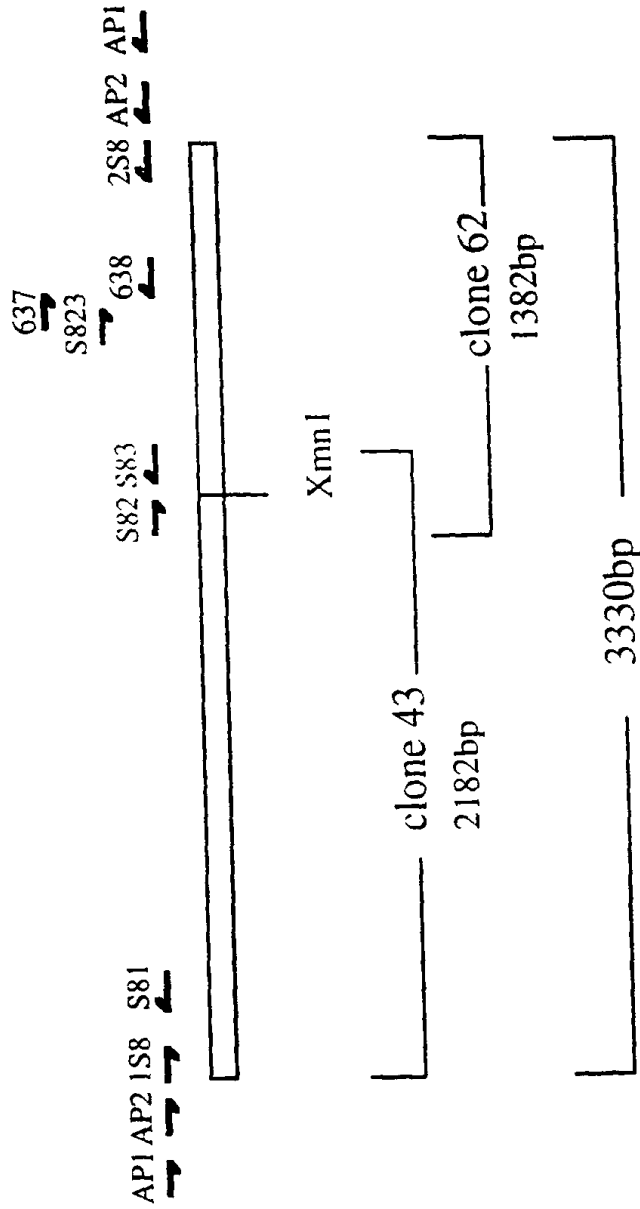
2725	GAA	TTA	AGT	GAA	GCG	TCA	CAC	ATA	ATC	AGA	ACC	TGT	TCT	TCT	CGT	TCG	CTT	GTT	ATA	TTA	2784	
876	E	L	S	E	A	S	H	I	I	R	T	C	S	S	R	S	L	V	I	L	895	
2785	GAT	GAG	CTT	GGA	AGA	GGC	ACT	AGC	ACA	CAC	GAC	GGT	GTA	GCC	ATT	GCC	TAT	GCA	ACA	TTA	2844	
896	D	E	L	G	R	G	T	S	T	H	D	G	V	A	I	A	Y	A	T	L	915	
2845	CAG	CAT	CTC	CTA	GCA	GAA	AAG	AGA	TGT	TTG	GTT	CTT	TTT	GTC	ACG	CAT	TAC	CCT	GAA	ATA	2904	
916	Q	H	L	L	A	E	K	R	C	L	V	L	F	V	T	H	Y	P	E	I	935	
2905	GCT	GAG	ATC	AGT	AAC	GGA	TTC	CCA	GGT	TCT	GTT	GGG	ACA	TAC	CAT	GTC	TCG	TAT	CTG	ACA	2964	
936	A	E	I	S	N	G	F	P	G	S	V	G	T	Y	H	V	S	Y	L	T	955	
2965	TTG	CAG	AAG	GAT	AAA	GGC	AGT	TAT	GAT	CAT	GAT	GAT	GTG	ACC	TAC	CTA	TAT	AAG	CTT	GTG	3024	
956	L	Q	K	D	K	G	S	Y	D	H	D	V	T	Y	L	Y	L	Y	K	L	975	
3025	CGT	GGT	CTT	TGC	AGC	AGG	AGC	TTT	GGT	TTT	AAG	GTT	GCT	CAG	CTT	GCC	CAG	ATA	CCT	CCA	3084	
976	R	G	L	C	S	R	S	F	G	F	K	V	A	Q	L	A	Q	I	P	P	995	
3085	TCA	TGT	ATA	CGT	CGA	GCC	ATT	TCA	ATG	GCT	GCA	AAA	TTG	GAA	GCT	GAG	GTA	CGT	GCA	AGA	3144	
996	S	C	I	R	A	I	S	M	A	A	K	L	E	A	E	V	R	A	R		1015	
3145	GAG	AGA	AAT	ACA	CGC	ATG	GGA	CCA	GAA	GGA	CAT	GAA	GAA	CCG	AGA	GGC	GCA	GAA	GAA		3204	
1016	E	R	N	T	R	M	G	E	P	E	G	H	E	E	P	R	G	A	E	E	1035	
3205	TCT	ATT	TCG	GCT	CTA	GGT	GAC	TTG	TTT	GCA	GAC	CTG	AAA	TTT	GCT	CTC	TCT	GAA	GAG	GAC	3264	
1036	S	I	S	A	L	G	D	L	F	A	D	L	K	F	A	L	S	E	E	D	1055	
3265	CCT	TGG	AAA	GCA	TTT	GAG	TTT	TTA	AAG	CAT	GCT	TGG	AAG	ATT	GCT	GGC	AAA	ATC	AGA	CTA	3324	
1056	P	W	K	A	F	E	F	L	K	H	A	W	K	I	A	G	K	I	R	L	1075	
3325	AAA	CCA	ACT	TGT	TCA	TTT	TGA	TTTAATCTTAACATTATAGCAACTGC	AGGCTCTTGATCATCTGTTAGTTGCG												3397	
1076	K	P	T	C	S	F	*														1082	
3398	TACTAACTT	ATG	TGT	ATT	AGT	ATA	ACA	AGA	AAA	GAG	AAT	TAG	AGAG	ATG	GAT	TCT	AAT	CCG				3458
1	M	C	I	S	I	T	R	K	E	N	*	M	D	S	N	P					5	
3459	GTG	TTG	CAG	TAC	ATC	TTT	TCT	CCA	CCC	GCA	TAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA										3522
6	V	L	Q	Y	I	F	S	P	P	A	*										16	

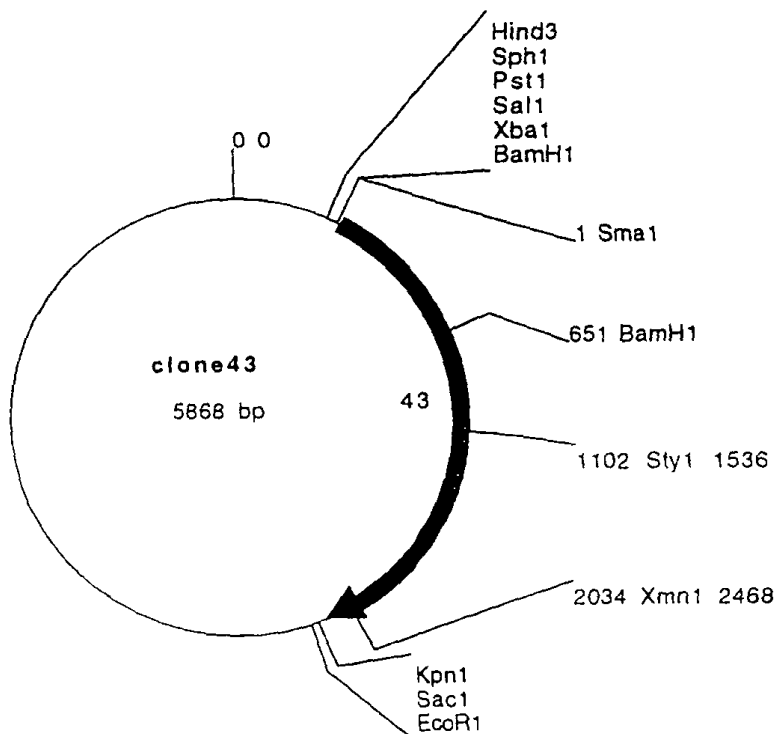
Figure 4 (Continued)





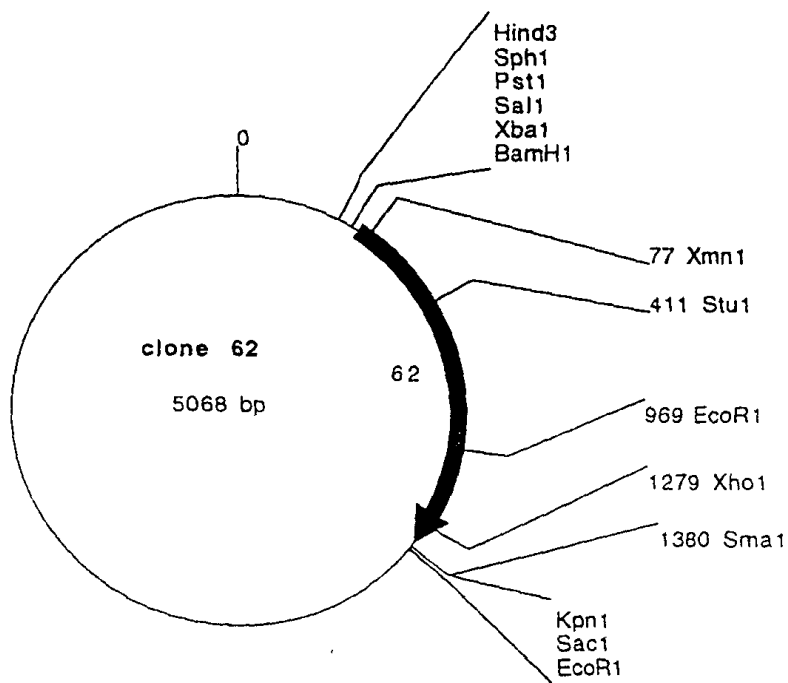
Figure 6





**Figure 7**

**Comments/References:** 43= 5' side of S8 (AtMSH6) 2182 bp in pUC18/Sma1



**Figure 8**

**Comments/References:** 62= 3' side of S8 (AtMSH6) 1379bp in pUC18/Sma1

**Figure 9**

DDI20T" 6E262560

934	AAG AAA ATG TCT GCA TCA CAA AAG CAA TAT TGG AGT GTT AAG AGT GAA TAT ATG GAC ATT	993
265	K K M S A S Q K Q Y W S V K S E Y M D I	284
996	GTG CTT TTC TTT AAA GTG GGG AAA TTT TAT GAG CTG TAT GAG CTA GAT GCG GAA TTA GGT	1053
285	V L F F K V G K F Y E L Y E L D A E L G	304
1054	CAC AAG GAG CTT GAC TGG AAG ATG ACC ATG AGT GGT GTG GGA AAA TGC AGA CAG GTT GGT	1113
305	H K E L D W K M T M S G V G K C R Q V G	324
1114	ATC TCT GAA AGT GGG ATA GAT GAG GCA GTG CAA AAG CTA TTA GCT CGT GGA TAT AAA GTT	1173
325	I S E S G I D E A V Q K L L A R G Y K V	344
1174	GGA CGA ATC GAG CAG CTA GAA ACA TCT GAC CAA GCA AYA GCC AGA GGT GCT AAT ACT ATA	1233
345	G R I E Q L E T S D Q A K A R G A N T I	364
1234	ATT CCA AGG AAG CTA GTT CAG GTA TTA ACT CCA TCA ACA GCA AGC GAG GGA AAC ATC GGG	1293
365	I P R K L V Q V L T P S T A S E G N I G	384
1294	CCT GAT GCC GTC CAT CTT CTT GCT ATA AAA GAG ATC AAA ATG GAG CTA CAA AAG TGT TCA	1353
385	P D A V H L L A I K E I K M E L Q K C S	404
1354	ACT GTG TAT GGA TTT GCT TTT GTT GAC TGT GCT GCC TTG AGG TTT TGG GTT GGG TCC ATC	1413
405	T V Y G F A F V D C A A L R F W V G S I	424
1414	AGC GAT GAT GCA TCA TGT GCT GCT CTT GGA GCG TTA TTG ATG CAG GTT TCT CCA AAG GAA	1473
425	S D D A S C A A L G A L L M Q V S P K E	444
1474	GTG TTA TAT GAC AGT AAA GGG CTA TCA AGA GAA GCA CAA AAG GCT CTA AGG AAA TAT ACG	1533
445	V L Y D S K G L S R E A Q K A L R K Y T	464
1534	TTG ACA GGG TCT ACG GCG GTA CAG TTG GCT CCA GTA CCA CAA GTA ATG GGG GAT ACA GAT	1593
465	L T G S T A V Q L A P V P Q V M G D T D	484
1594	GCT GCT GGA GTT AGA AAT ATA ATA GAA TCT AAC GGA TAC TTT AYA GGT TCT TCT GAA TCA	1653
485	A A G V R N I I E S N G Y F K G S S E S	504
1654	TGG AAC TGT GCT GTT GAT GGT CTA AAT GAA TGT GAT GTT GCC CTT AGT GCT CTT GGA GAG	1713
505	W N C A V D G L N E C D V A L S A L G E	524
1714	CTA ATT AAT CAT CTG TCT AGG CTA AAG CTA GAA GAT GTA CTT AAG CAT GGG GAT ATT TTT	1773
525	L I N H L S R L K L E D V L K H G D I F	544
1774	CCA TAC CAA GTT TAC AGG GGT TGT CTC AGA ATT GAT GGC CAG ACG ATG GTA AAT CTT GAG	1833
545	P Y Q V Y R G C L R I D G Q T M V N L E	564

Figure 9 (Continued)

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1834	ATA TTT AAC AAT AGC TGT GAT GGT CCT TCA GGG ACC TTG TAC AAA TAT CTT GAT AAC	1893
565	I F N N S C D G G P S G T L Y K Y L D N	584
1894	TGT GTT AGT CCA ACT GGT AAG CGA CTC TTA AGG AAT TGG ATC TGC CAT CCA CTC AAA GAT	1953
585	C V S P T G K R L L R N W I C H P L K D	604
1954	GTA GAA AGC ATC AAT AAA CGG CTT GAT GTA GTT GAA GAA TTC ACG GCA AAC TCA GAA AGT	2013
605	V E S I N K R L D V V E E F T A N S E S	624
2014	ATG CAA ATC ACT GGC CAG TAT CTC CAC AAA CTT CCA GAC TTA GAA AGA CTG CTC GGA CGC	2073
625	M Q I T G Q Y L H K L P D L E R L L G R	644
2074	ATC AAG TCT AGC GTT CGA TCA TCA GCC TCT GTG TTG CTT GCT CTT CTG GCG AAA AAA GTG	2133
645	I K S S V R S S A S V L P A L L G K V	664
2134	CTG AAA CAA CGA GTT AAA GCA TTT GGG CAA ATT CTG AAA GGG TTC AGA AGT GGA ATT GAT	2193
665	L K Q R V K A F G Q I V K G F R S G I D	684
2194	CTG TTG TTG GCT CTA CAG AAG GAA TCA AAT ATG ATG AGT TTG CTT TAT AAA CTC TGT AAA	2253
685	L L A L Q K E S N M M S L L Y K L C K	704
2254	CTT CCT ATA TTA GTA GGA AAA AGC GGG CTA GAG TTA TTT CTT TCT CAA TTC GAA GCA GCC	2313
705	L P I L V G K S G L E L F L S Q F E A A	724
2314	ATA GAT AGC GAC TTT CCA AAT TAT CAG AAC CAA GAT GTG ACA GAT GAA AAC GCT GAA ACT	2373
725	I D S D F P N Y Q N Q D V T D E N A E T	744
2374	CTC ACA ATA CTT ATC GAA CTT TTT ATC GAA AGA GCA ACT CAA TGG TCT GAG GTC ATT CAC	2433
745	L T I L I E L F I E R A T Q W S E V I H	764
2434	ACC ATA AGC TGC CTA GAT GTC CTG AGA TCT TTT GCA ATC GCA GCA AGT CTC TCT GCT GGA	2493
765	T I S C L D V L R S F A I A A S L S A G	784
2494	AGC ATG GCC AGG CCT GTT ATT TTT CCC GAA TCA GAA GCT ACA GAT CAG AAT CAG AAA ACA	2553
785	S M A R P V I F P E S E A T D Q N Q K T	804
2554	AAA GGG CCA ATA CTT AAA ATC CAA GGA CTA TGG CAT CCA TTT GCA GTT GCA GCC GAT GGT	2613
805	K G P I L K I Q G L W H P F A V A A D G	824
2614	CAG TTG CCT GTT CCG AAT GAT ATA CTC CTT GGC GAG GCT AGA AGA AGT GGC AGC ATT	2673
825	Q L P V P N D I L L G E A R S S G S I	844
2674	CAT CCT CGG TCA TTG TTA CTG ACG GGA CCA AAC ATG GGC GGA AAA TCA ACT CTT CTT CGT	2733
845	H P R S L L L L T G P N M G G K S T L L R	864

Figure 9 (Continued)

DDZCCTT: 6E262560

2734	GCA ACA TGT CTG GCC GTT ATC TTT GCC CAA CTT GGC TGC TAC GTG CCG TGT GAG TCT TGC	2793
865	A T C L A V I F A Q L G C Y V P C E S C	884
2794	GAA ATC TCC CTC GTG GAT ACT ATC TTC ACA AGG CTT GGC GCA TCT GAT AGA ATC ATG ACA	2853
885	E I S L V D T I F T R L G A S D R I M T	904
2854	GGA GAG AGT ACC TTT TTG GTA GAA TGC ACT GAG ACA GCG TCA GTT CTT CAG AAT GCA ACT	2913
905	G E S T F L V E C T E T A S V L Q N A T	924
2914	CAG GAT TCA CTA GTA ATC CTT GAC GAA CTG GGC AGA GGA ACT AGT ACT TTC GAT GGA TAC	2973
925	Q D S L V I L D E L G R G T S T F D G Y	944
2974	GCC ATT GCA TAC TCG GTT TTT CGT CAC CTG GTA GAG AAA GTT CAA TGT CGG ATG CTC TTT	3033
945	A I A Y S V F R H L V E K V Q C R M L F	964
3034	GCA ACA CAT TAC CAC CCT CTC ACC AAG GAA TTC GCG TCT CAC CCA CGT GTC ACC TCG AAA	3093
965	A T H Y H P L T K E F A S H P R V T S K	984
3094	CAC ATG GCT TGC GCA TTC AAA TCA AGA TCT GAT TAT CAA CCA CGT GGT TGT GAT CAA GAC	3153
985	H M A C A F K S R S D Y Q P R G C D Q D	1004
3154	CTA GTG TTC TTG TAC CGT TTA ACC GAG GGA GCT TGT CCT GAG AGC TAC GGA CTT CAA GTG	3213
1005	L V F L Y R L T E G A C P E S Y G L Q V	1024
3214	GCA CTC ATG GCT GGA ATA CCA AAC CAA GTG GTT GAA ACA GCA TCA GGT GCT CAA GCC	3273
1025	A L M A G I P N Q V V E T A S G A A Q A	1044
3274	ATG AAG AGA TCA ATT GGG GGA AAC TTC AAG TCA AGT GAG CTA AGA TCT GAG TTC TCA AGT	3333
1045	M K R S I G E N F K S S E L R S E F S S	1064
3334	CTG CAT GAA GAC TGG CTC AAG TCA TTG GTG GGT ATT TCT CGA GTC GCC CAC AAC AAT GCC	3393
1065	L H E D W L K S L V G I S R V A H N A	1084
3394	CCC ATT GGC GAA GAT GAC TAC GAC ACT TTG TTT TGC TTA TGG CAT GAG ATC AAA TCC TCT	3453
1085	P I G E D D Y D T L F C L W H E I K S S	1104
3454	TAC TGT GTT CCC AAA TAA ATG GCT ATG ACA TAA CACTATCTGAAGCTGTTAAGTCTTTGCCCTCT	3521
1105	Y C V P K * M A M T *	5
3522	G ATG TTT ATT CCT CTT AAA AAA TGC TTA TAT ATC AAA AAA TTG TTT CCT CGA TTA AAA	3579
1	M F I P L K K C L Y I K K L F P R L K	19
3580	AAA AAA AAA AAA AAA AAA AAA AAA	3606
20	K K K K K K K K K K	28

Figure 9 (Continued)

### Figure 10

[illegible]



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AAAACAACAAGACTTTTTTTTACTTTTTACATTGGTCAACAAAATACAA	150
GATAAACGACATCGTTTAAATCATTTCCCAATTTTACCCCTAAGTTTAAAC	200
CCTAGAACCTTCTCCATCTTCGCAAGCACAGCCTGATTAGGAACAGCTTT	250
ACCATTCTCATATTCCTGAACTACCTGAGTCCTCTCATTGATCTGTTTCG	300
CCAAATCCGCTTGTGACATCTTCTTCTCCAATCTCGCTTTCTGTATCATC	350
AACCTCACCTCTGCTTTTACACGATCCATCGCCGAGGCTCTGTTTCTTC	400
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GATCCCTTTACGATAGAAAGACCTTACACATACCACCTGATGTTTTCAA	2200

Figure 11

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Figure 11 (Continued)

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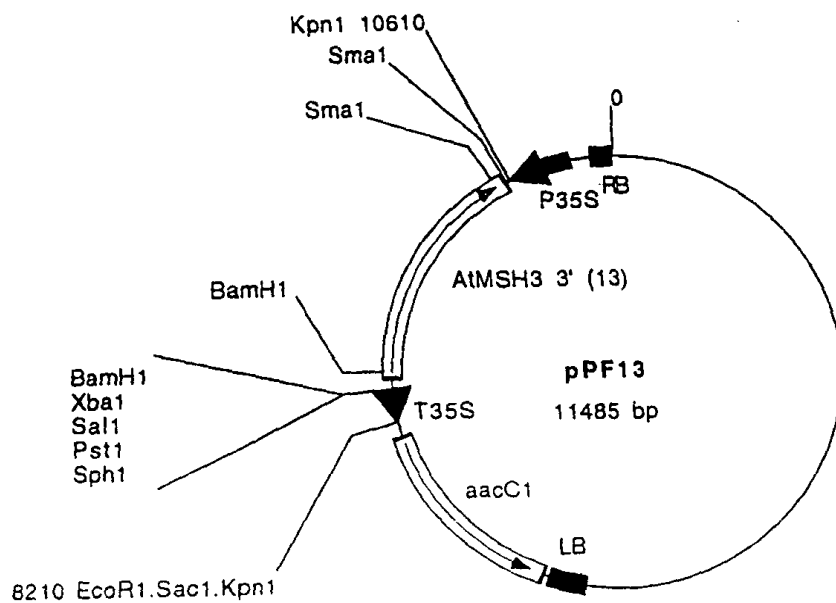
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Figure 11 (Continued)

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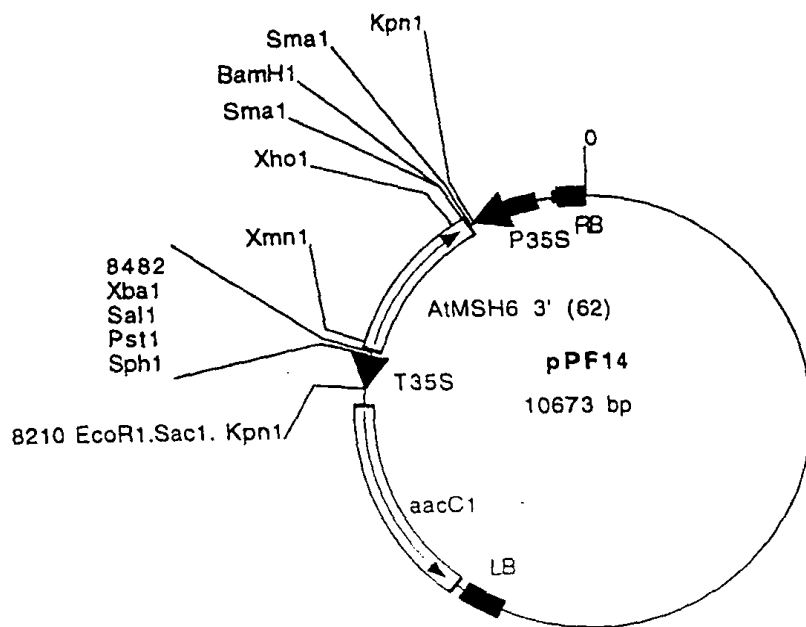
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Figure 11 (Continued)



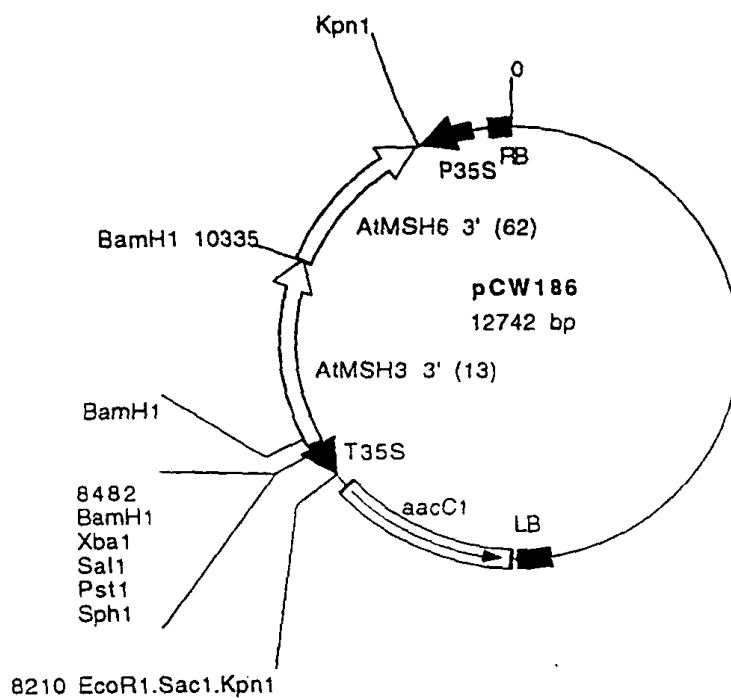
**Figure 12**

**Comments/References:** AtMSH3 3' side antisense : AtMSH3 3' (13 = 2104bp) from pUC18/13 Sal1/Sst1/T4 into pCW164 BamH1/T4 in Agrobacterium LBA44O4



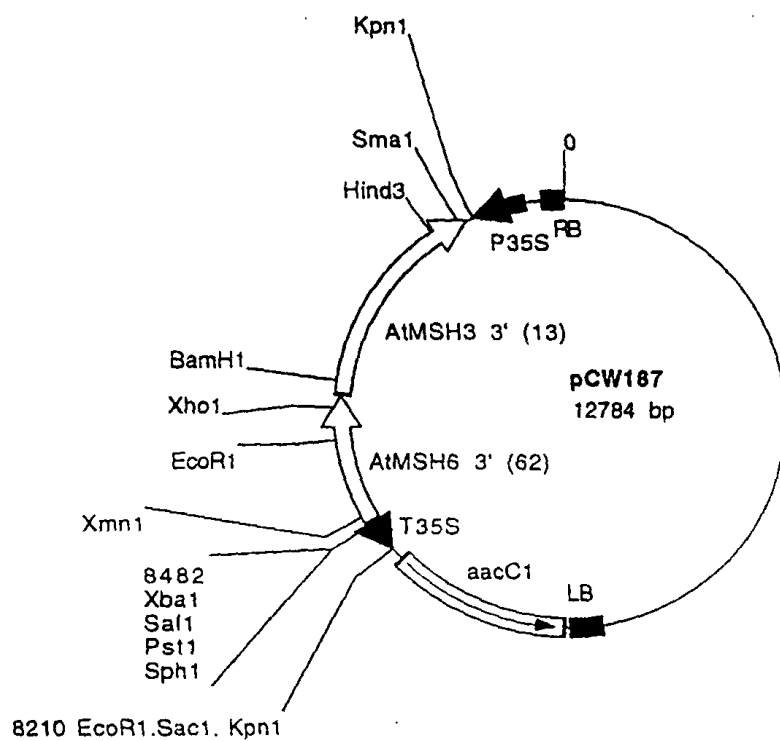
**Figure 13**

**Comments/References:** AtMSH6 (S8) 3' side antisens : 62 SalI/SstI/T4 (1379bp)  
into pCW164 BamHI/T4



**Figure 14**

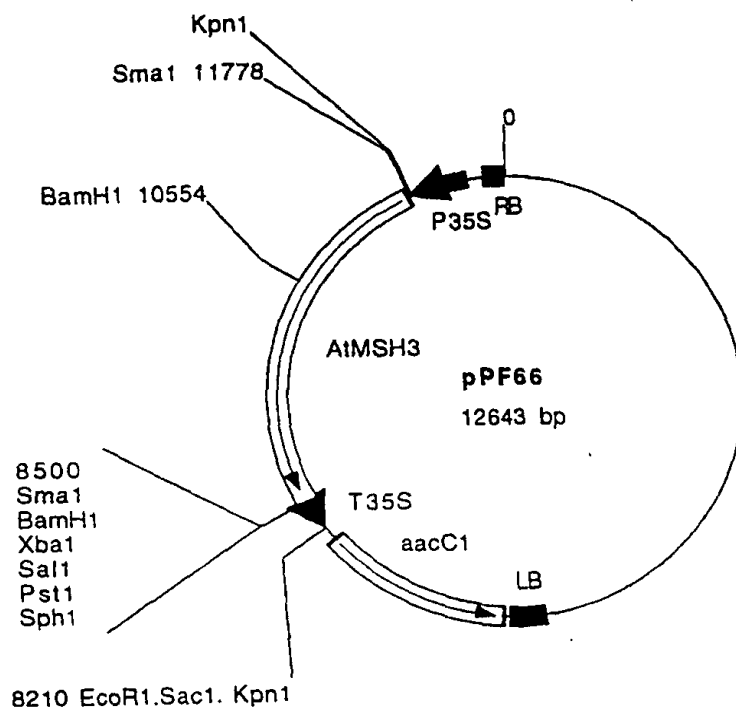
**Comments/References:** AtMSH6 3'/AtMSH3 3' antisense : AtMSH6 (S8) 3' side (62=1379bp)  
 Sal1/Sst1/T4 into pPF13 (pCW164 AtMSH3 (S5) 3' side (13=2104) antisens)/Sma1. in  
 LBA4404



# Figure 15

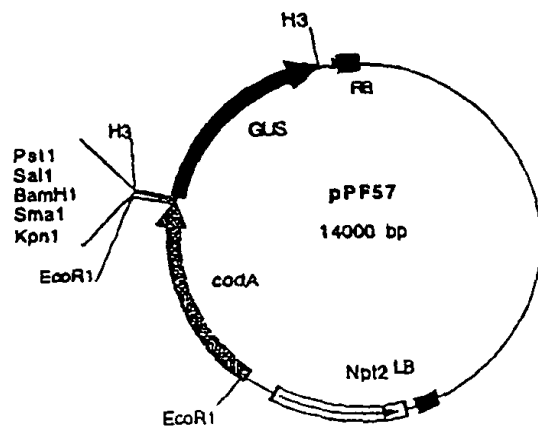
**Comments/References:** AtMSH3 3'/AtMSH6 3' antisens (D) : AtMSH3 (S5) 3' side (13=2104bp) Sal1/Sst1/T4 into pPF14 (AtMSH6 (S8) 3'side (62=1379bp) antisense into pCW164)/Sma1. in LBA4404





# Figure 16

**Comments/References:** AtMSH3 (S8) complete, sense orientation : pPF26 (3342bp)  
Sma1 into pCW164 Sma1

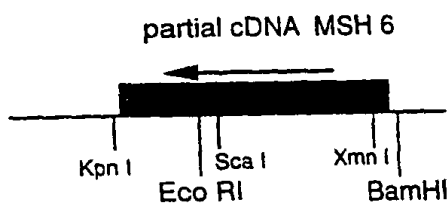


**Figure 17**

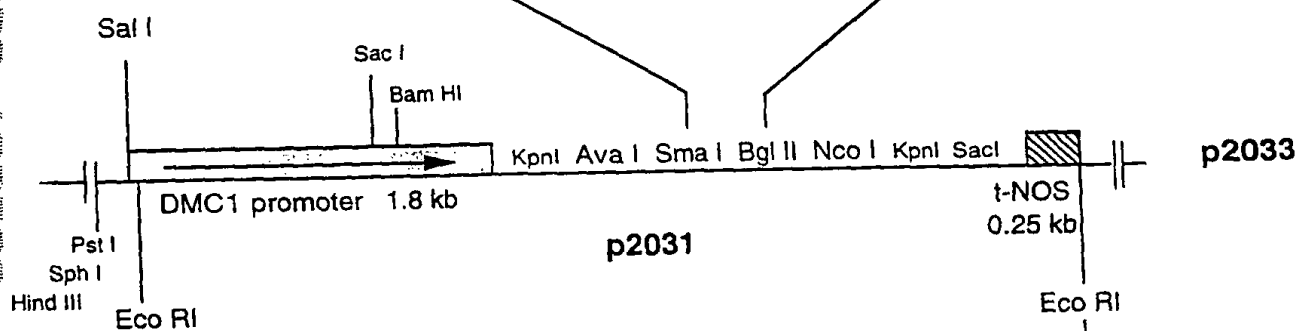
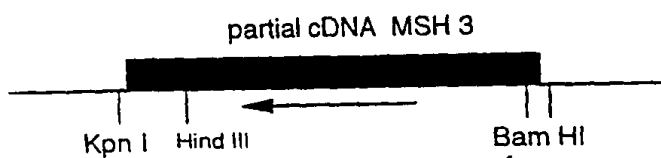
**Comments/References:** pPZP111 with *codA* EcoR1 cassette in EcoR1 site and Hind3 GUS cassette in Hind3 site. KanR. All genes under Promoter/terminator 35S

Figure 18

cDNA  
clon 62



cDNA  
clone 13



p3242

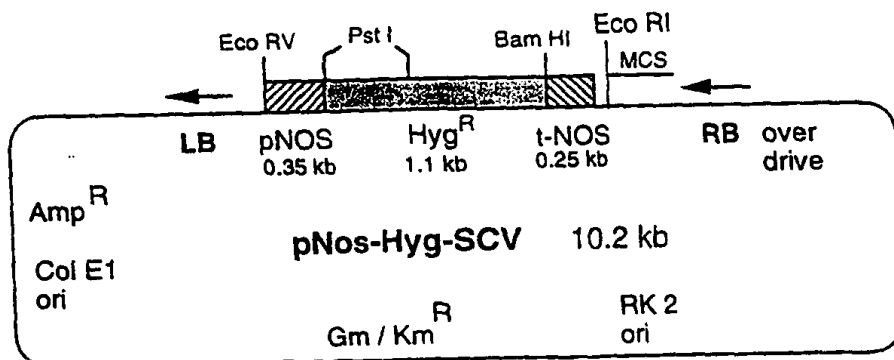


Figure 19

p3243

